No. 669,393. Patented Mar. 5, 1901.

H. C. JENT.

CHURN.

(Application filed Dec. 3, 1900.)

(No Model.)

Fig. 1.

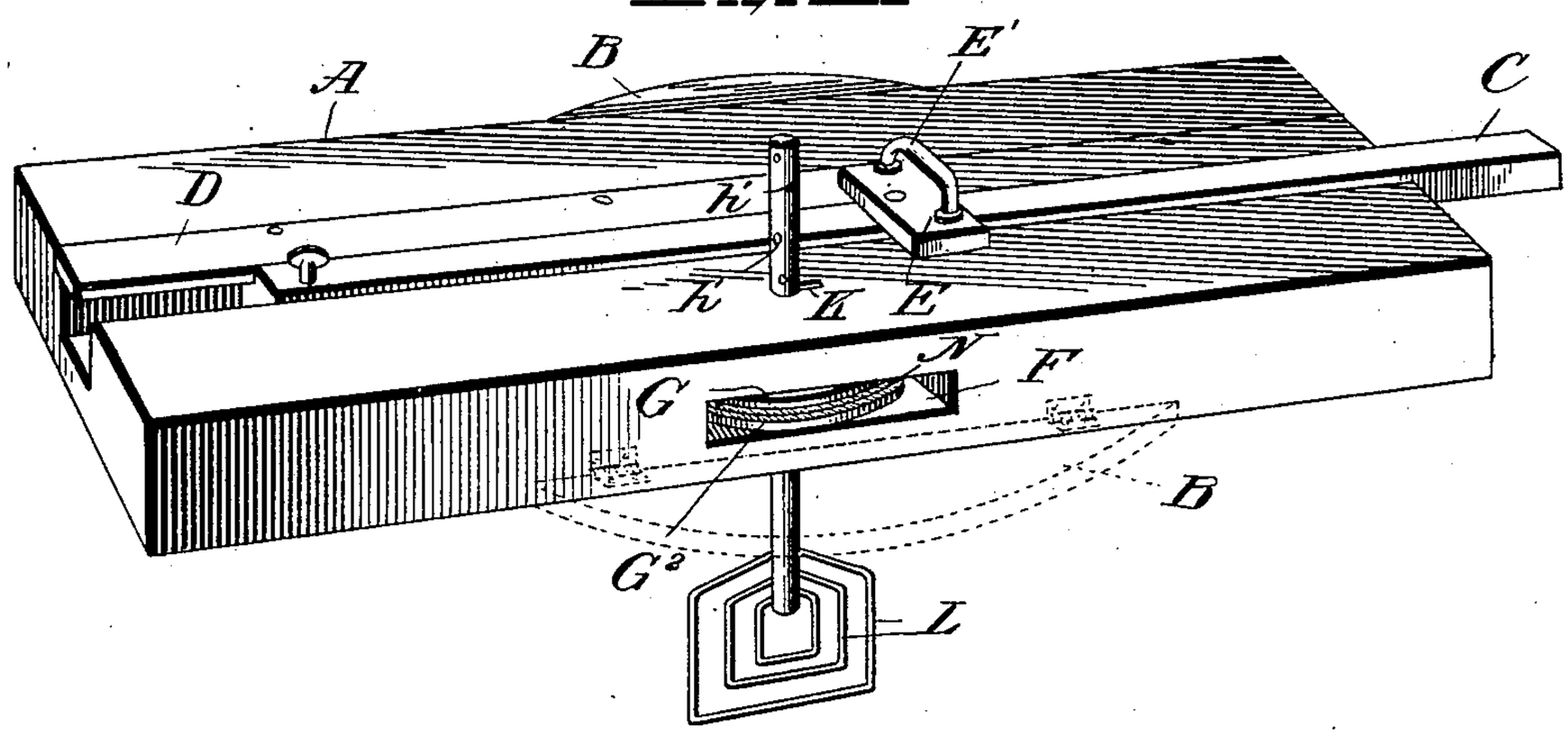

Fig. 2.

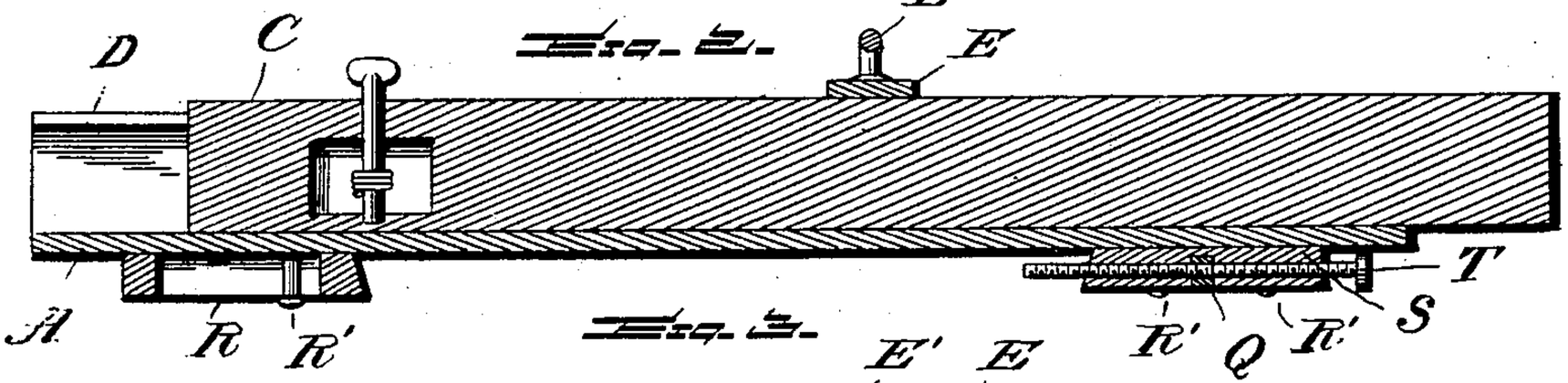

Fig. 3.

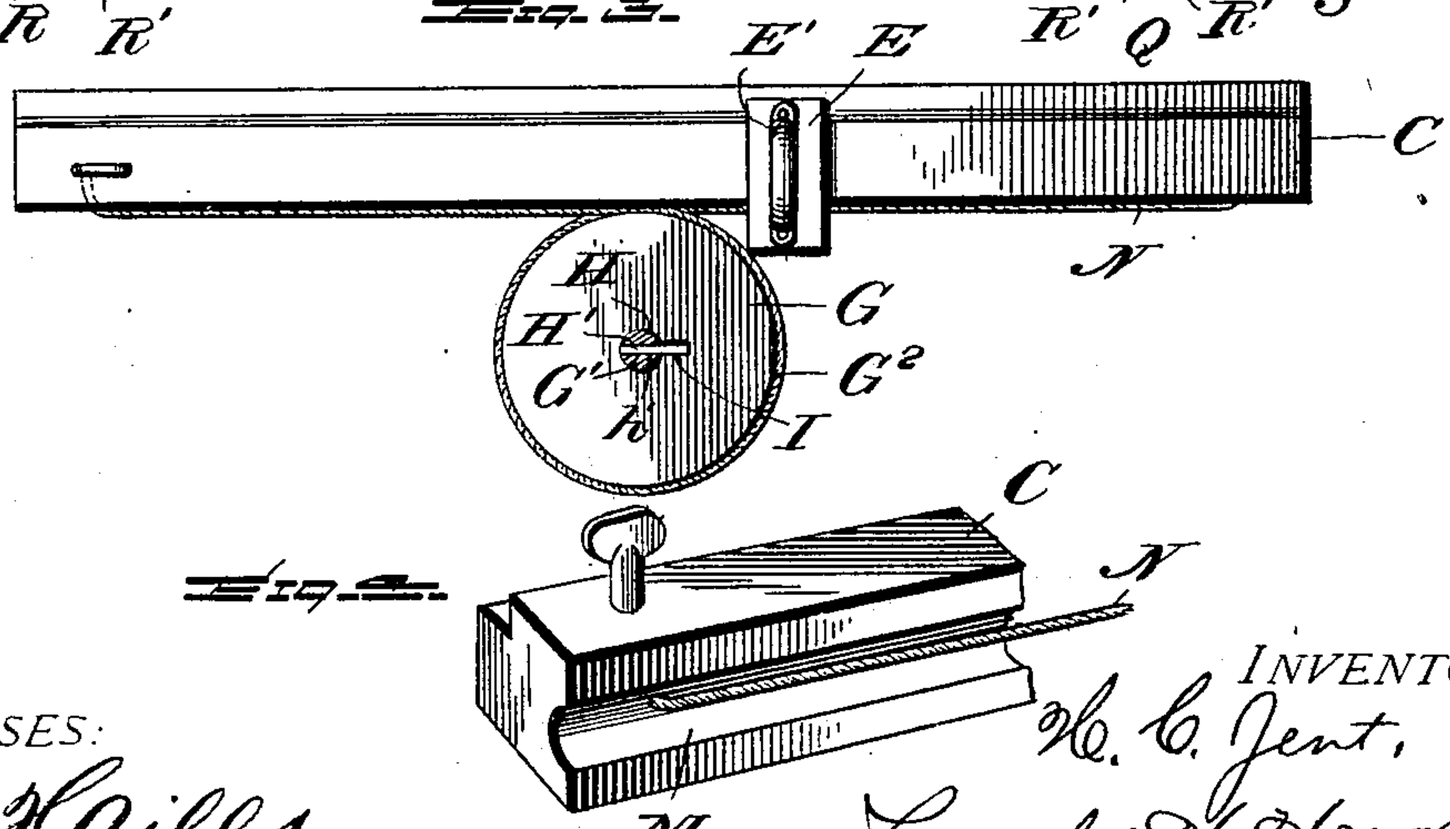

Fig. 4.

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HENRY CLAY JENT, OF HEWINS, KANSAS.

CHURN.

SPECIFICATION forming part of Letters Patent No. 669,393, dated March 5, 1901.

Application filed December 3, 1900. Serial No. 38,480. (No model.)

To all whom it may concern:

Be it known that I, HENRY CLAY JENT, a citizen of the United States, residing at Hewins, in the county of Chautauqua and State of Kansas, have invented certain new and useful Improvements in Churns; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in churns, and especially to a mechanism for rotating a dasher; and it consists in the provision of a block which is adapted to be held to the top of the churn and having a reciprocating strip mounted therein which has rope or belt connections with a wheel which is secured to rotate with the dasher, whereby as said strip is reciprocated the dasher is made to rotate in opposite directions.

To these ends and to such others as the invention may pertain the same consists, further, in the novel construction, combination, and adaptation of parts, as will be hereinafter more fully described, and then specifically defined in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form part of this application, and in which drawings similar letters of reference indicate like parts throughout the several views, in which—

Figure 1 is a perspective view of my improved churn mechanism. Fig. 2 is a vertical central view through the block-reciprocating mechanism and clamping means for holding the apparatus to a churn. Fig. 3 is a detail view showing the manner of connecting the reciprocating block with the grooved wheel which turns the dasher. Fig. 4 is a detail view of the bar which reciprocates to make the dasher-shaft rotate.

Reference now being had to the details of the drawings by letter, A designates a block of any suitable size, which is preferably rectangular in shape and adapted to rest upon the top of a churn. On opposite sides of said block are hinged the semicircular rings B, which are adapted to cover over the spaces at the top of the churn on either side of said block. In the drawings but one of these wings is shown, as the other is left off for the purpose of disclosing features of the invention. Said block is grooved longitudinally upon its upper surface to receive an angled reciprocating block C, which is held in place by means of a stop D. A block E is provided, which is secured to the upper surface of the reciprocating strip C and carries a handle E′, whereby said strip is worked back and forth.

The edge of the block A is mortised out, as at F, to receive a dasher-operating wheel G. Said wheel G has a central aperture G′ to receive the dasher-shaft H, which is perforated, as at *h*′. Leading from the central aperture in said wheel (which is grooved about its circumference, as at G^2) is a slot I, into which a pin H′, secured to the dasher-shaft, is adapted to be seated when the dasher is inserted in place in readiness for use. The block A has a vertical aperture passing through the central part of said mortising F and adapted to register with the central aperture in the wheel G when the latter is placed within the mortised aperture and in registration with said vertical aperture. In order to allow the pin on said dasher-shaft to enter the aperture with the shaft, the upper portion of said aperture, leading through into the mortising, has a recess K to allow said lug to pass through and into the slot I in the wheel G, whereby said wheel and shaft are caused to rotate together. The lower end of the shaft has the stirrers L, which may be arranged in any suitable manner and of ordinary construction. By putting said pin in any one of the apertures *h*′ in the stirrer-shaft it will be observed that the height at which it is desired to have the lower end of the dasher disposed may be easily regulated. One longitudinal edge of the reciprocating block is grooved, as at M, and a cord, strap, or other cable N is adapted to be fastened at one end of said reciprocating strip, passed through said grooved portion M, wound, preferably, twice or more about the grooved wheel G, and thence continued beyond the dasher in said scalloped portion or groove M and secured at its other end to the opposite end of the reciprocating strip. By this means it will be observed that as the

strip C is reciprocated by the operator taking hold of the handle E′ thereon the dasher-shaft will be caused to rotate alternately in opposite directions, and thus thoroughly agitate the cream.

On the under surface of the block A are held the adjustable clamping-blocks R and S, which are held to the block A by means of the screws R′, which are passed through slots in said blocks, the latter being held by means of wing-nuts of ordinary construction. One of said blocks, as S, is apertured longitudinally to receive an adjusting-screw T, on which a nut Q is held in a central recess or aperture in said block S, whereby as said screw T is turned in one direction or the other the clamping-block S may be worked backward and forward in order to engage and hold the block A to the churn.

By this mechanism my apparatus may be easily applied to churns of various sizes.

Having thus described my invention, what I claim to be new, and desire to secure by Letters Patent, is—

A mechanism for operating churns, comprising a grooved block having a vertical aperture and a mortised recess in its edge, a reciprocating strip held in said groove, said strip having a grooved edge, a vertically-mounted rotatable dasher-shaft mounted in the aperture in said block, said shaft having a vertical series of apertures, a grooved pulley seated in the mortised recess and provided with a slot, a pin adapted to be held in any one of the apertures in said dasher-shaft and to be seated in the slot in said grooved pulley, and a cord secured to one end of said reciprocating strip, passed through the grooved edge of said strip and about said grooved wheel, thence secured to the opposite end of said reciprocating strip, and a block and handle carried thereby for reciprocating said strip, and means for holding the latter in place, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY CLAY JENT.

Witnesses:

E. T. CHILDERS,

HARRY MARRS.